

An Essay

on

Hydrocephalus acutus

Respectfully Submitted

To the Faculty of the  
Homoeopathic Medical College

of Pennsylvania

On the

Twenty ninth of January

One thousand eight hundred & fifty three  
by

John Freedley Musgrave

State of Pennsylvania



## Hydrocephalus acutus

For the knowledge we possess relative to the nature and characteristic symptoms of effusion of serum within the cranium, we are indebted almost entirely to modern investigation and pathological research. It is not quite a century, since the first accurate account of the symptoms and progress of acute hydrocephalus was published in a posthumous work by Dr Whytt, under the title of Observations on the Dropsy of the brain, in which he gave a very elaborate account of the history, symptomatology, and progress of the disease. But his views of its nature were merely hypothetical, attributing all the symptoms to effects of pressure on the brain by the effused fluid.

The first approach to a correct theory of the disease was contained in an essay, by Dr Quin of Dublin, published 1799, in which he pointed out the affinity this disease had to the inflamma-



-tory diseases, and supported his views by the post mortem appearances which this disease presented on dissection. This view of the nature of this disease, supported by such a pillar as pathology, could not pass through the hands of the medical profession without arousing some great minds into a further investigation of the newly founded theory, in quest of its validity, and also to make new discoveries of what escaped the observations of their predecessors and assist in the perfection of the science.

And it has become a settled point by writers of the present day, that this disease is nothing more or less than inflammation of the arachnoid membrane with effusion of serum and lymph, and sometimes pus.

This form of hydrocephalus affects chiefly children from the ages of two to six years; slowly manifesting itself by fever, lassitude, and pain in the head, slowness of the pulse,



contraction or dilatation of the pupil, somnolency, tendency to convulsions and paralysis.

Writers on this subject, have been led by the variety and complexity of the symptoms to arrange them into several groups, characteristic of different periods of the disease which are termed stages. These stages are four in number, were founded by Gölis on presumed pathological conditions of the brain at successive periods of the disorder. These are first the period of turgescence; second inflammation; third effusion; fourth paralysis.

First stage, or the period of turgescence. It is seldom that the symptoms of this stage are distinctly perceptible; so much so that in some cases they are entirely unnoticed. And when they are noticed, few are characteristic of hydrocephalus. Among the precur-



-sory symptoms, are sudden changes of disposition from cheerfulness and playfulness to peevishness. The child that was previously able to run about with ease, has an unsteady gait; he raises his feet high from the ground, and is liable to fall even in walking on the level floor. On rising from a recumbent posture, or raising or moving the head suddenly, vertigo or sudden stupefaction is experienced; sometimes there is tenderness of the scalp, rigidity of the neck &c. In some cases the secretion of urine is scanty, in others the urine is turbid and flocculent. Change of the healthy appearance of the child to a paleness - loss of appetite - restless sleep, during which the child moans and groans, starts up as if frightened - alternation of creeping chills and flushes of heat.

*The symptoms denoting derangements of*  
This stage sometimes lasts only a few



hours, at other times a few days.

The second stage or period of inflammation. Amongst the symptoms most frequently present in this stage are pains in the forehead and temporal region, of a violent character, also pains in the neck, abdomen, and limbs, attended with vomiting and is mostly excited by moving the child suddenly, as it is less likely to occur when kept quiet.

The head feels quite hot, the conjunctiva is sometimes slightly injected, pupil of the eye closely contracted. At this time there is a manifest aversion to light and noise, which indicate an increased sensibility of the nervous system; the mind at this time is little impaired, for correct answers to questions are given, though unwillingly. The symptoms denoting derangements of the digestive organs are numerous, the tongue



is slightly furred, nostrils always dry, and the lips cracked; breath has a sickly smell, with complete loss of appetite. The epigastric region and right hypochondriac is often tumefied and very sensitive to pressure, though in the progress of the disease the whole abdomen becomes flaccid without any proportional increase of alvine discharges. There is commonly great tendency to constipation - dysuria is sometimes complained of - pulse is quick - cuticle is dry and of an unhealthy color. At this time a vesicular eruption, at first very indistinct, but becoming more manifest towards the latter part of the disease, makes its appearance; the eruption occurs most frequently on the outer side of the arms and face.

The duration of the second stage varies according to the acuteness of the attack,



from a few hours to a week or more.

The third stage or stage of exudation.

There is a slow pulse, accelerated on slightest motion, which is accompanied with languor and torpor; and the head is <sup>less</sup> complained of than in the preceding stage. Squinting and double vision now occur along with dilatation and perfect immobility of the pupil. The child lies quiet, not able to keep its head erect; and is incessantly picking at its nose, lips, or hair; and either in a fixed stare or spasmodic winking. Appetite in this stage generally returns in a voracious manner.

Towards the close of this stage the soporose condition is generally changed and the child has the appearance of recovering its senses, which is indicated by its apparent noticing surrounding objects. But this is oftentimes an apyrexia of short duration,



and is followed in a few days by a deeper state of coma than before. The urine and stools are passed involuntarily. At this period of the disease the child generally gives utterance to a shrill piercing scream which is said to be characteristic of this disease and during its continuance the pulse becomes accelerated. If the disease should not be arrested in this stage it passes into the fourth in a few days.

The whole duration of this stage is variously stated from one to two weeks.

The fourth stage, or the stage of paralysis. The pulse is small, irregular, and hurried - stupor and sopor increase more and more - the paralytic attacks increase in number and in intensity, from slight spasmodic twitchings of the muscles of the face to vio-



-lent contractions of the muscles of the trunk  
and extremities. And is usually soon follow-  
-ed by paralysis of one side, the opposite  
side continuing to be convulsed at intervals  
-complete blindness and deafness - the eye-  
-lids remain half closed - tongue becomes  
dirty and black looking - the breath fetid  
- respiration unequal and stertorous - the  
skin is burning hot with profuse perspiration  
- the feet become cold - pulse gradually be-  
-coming weaker and weaker and a violent  
convulsion closes the scene.

The duration of this stage is more variable  
than any of the others, from a few hours to  
one or two weeks.

The prognosis of hydrocephalus is always  
doubtful and generally unfavorable. In the  
first, second, and third stages under good



treatment the prognosis may be considered favourable; but in the fourth stage recovery is rarely known to occur. When it occurs during a slow and imperfect convalescence from an acute disease or by metastasis in the course of Pertussis, Scarlet fever, difficult dentition, or other tedious and severe diseases, by which the powers of the system have been greatly reduced, the prognosis is very unfavorable.

The diagnosis of hydrocephalus is in the first stages somewhat difficult, and it is of the utmost importance that this disease should be detected as early as possible, and physicians attending to the disorders of children, should always be on their guard, that they do not confound the early stages with some of the other diseases incidental to childhood.



The principal difficulty is to distinguish incipient hydrocephalus, from fevers produced from helminthiasis, also by the irritation of dentition, or from the infantile remittent fever. These fevers have several symptoms in common with hydrocephalus, and might be readily confounded with it, but the commencement of hydrocephalus is generally more gradual. The disorder of the stomach is more constant, especially the frequent recurrence of vomiting. There is an aversion to light - the stools are of a dark dirty green color, and glairy - the pain in the head, when fixed, is oftener dull than acute, but so overpowering that it does not admit of the head being raised from the pillow - sometimes it is a very acute pain at intervals, and these intervals sometimes regular in their occurrence. It darts through the centre of the brain, the child is roused with an expres-



-sion of helpless anguish. from the dozing,  
which precedes this acute pain, and into  
which he instantly relapses. When it is gone  
the intermissions of the disease are very ir-  
regular. In the remittent fever the affections  
of the head is commonly much less obvious,  
the remissions being generally regular and  
complete, there being one in the morning or  
early in the forenoon, followed by an ex-  
-acerbation in the afternoon, which continues  
through the night. The stools are usually  
dark brown or mud like - a glairy dark green  
discharge however has been sometimes observed  
in this fever. All organic diseases of the brain  
have a general resemblance to hydrocephalus  
and to each other. But the disorders in  
these cases is much more tedious than hy-  
-drocephalus.

Causes. The predisposing causes are scro-



phulosis, early and rapid development of the cerebral organs, have been considered as among the principal predisposing causes, and children with large heads, and the fontanels remaining a long time unclosed are remarkably liable to this disease.

The exciting causes are the frequent and indiscriminate use of narcotics and various preparations of mercury in the diseases incidental to dentition. And the deleterious practice of giving alcoholic drinks and carminative mixtures to infants, which is done by some people; although we find that our profound friends, the allopathic physicians, recommend this very practice, with the view to give tone and strengthen the children. To which we may add external injuries, such as falls and blows on the head - sudden suppression of



accustomed discharges, or drying up of sores behind the ears, and inflammation of the external ear. This disease is also very frequently excited by metastasis, from pertussis, scarlet fever, measles, &c.

*Therapeutics.* In the treatment of the first stage the following remedies have been found most useful. Acon, Puls, Cham.

*Aconitum.* Where there is a tendency to anger - easily frightened - vertigo on raising the head or on rising from a sitting posture - dimness of the eyes - startings in the sleep, restlessness, tossing from one side to the other - loss of appetite, &c.

*Pulsatilla.* is indicated when there is peevishness - sullen mood - restless sleep, with toss-



-ing, screaming, and starting as if in affright,  
-staggering when walking - loss of appetite, -  
-Should the above symptoms occur with vertigo,  
flushes of heat - heat in the face in the  
evening, pulsatilla is particularly indicated.

Chamomilla. Peevishness and ill humour  
dissatisfied with everything that is done, -  
startings, uttering sudden cries - tossing about  
during sleep - vertigo when stooping, and on  
rising from bed - aversion to food - pale  
sunken countenance with features as if dis-  
torted by pain - urine hot & yellow with  
flocculent sediment.

Remedies for the second stage are,  
Bell., Merc., Ars., Arn., Bry.

Belladonna. Aching pain in the fore-  
-head, during motion, it is increased so



much that it obliges the patient to close his eyes - Cramp like constrictive pain in the abdomen, and inclination to vomit - drawing pain in the lower limbs - aching pain in the outer side of the neck - contraction of the pupils - violent redness and heat of the face - loss of appetite - difficult micturition.

Mercurius, Constrictive pain with heat and burning in the head worse in the evening and at night also redness of the conjunctiva - fetid smell from the mouth - distention of the abdomen which is painful to contact or pressure.

Arsenicum, Stupifying pain generally of an oppressive nature - contraction of the pupils with a wild staring look and excessive photophobia - distention of the



abdomen and spasmodic cutting pains in the  
abdomen - tongue coated white - vomiting of every  
thing the patient eats and drinks - pains in  
the lower extremities as if bruised - with excessive  
sensitiveness to noise and light.

*Arnica* Heat in the head the remainder  
of the body being cool - darting pain in the  
forehead with sensation as if the integuments of  
the forehead were spasmodically contracted  
contraction of the pupils - pains in all the limbs  
as if they had been bruised - putrid smell  
from the mouth - chapped lips tongue coated  
white or yellow.

*Bryonia* Headache when stooping as if  
all the contents of the head would issue from  
the forehead - burning pain in the forehead  
and heat in the head.



Remedies for the third stage, are Bell.  
Cin. Hell. Op. Stram. Hyos.

Belladonna. Dilated immovable pupils sees things double - continual trembling and winking of the eyelids.

Cina. Dilatation of the pupils - continual picking and boring of the nose - the whole head feels hot dull stitches in the brain, especially in the left side of the head.

Helleborus. The mind has no power over the body - dullness and confusion of the mind - burning heat in the head - painful stupefaction of the head as if from intoxication.

Opium. Dilated pupil insensible to the light - slow pulse - involuntary stools



A - complete loss of consciousness and sensation.

*Stramonium*. Convulsive movements of the limbs, and especially of the upper part of the body, and of the abdomen - pale and haggard face with stupid expression or redness and bloatedness of the face - loss of consciousness and of sensation - sometimes with cries, &c.

*Hyoscyamus*. Convulsive movements of certain limbs or of the whole body - grinding of the teeth - loss of consciousness - unnoticed emission of urine, deep and lethargic sleep with snoring. -

Remedies for the fourth stage are  
*Op. Cic. Cupr. Zinc.*



Opium. Spasmodic movements of the facial muscles - convulsive trembling of the limbs - the eyes only half closed - tongue black - irregular difficult respiration - and profuse perspiration.

Cicuta. Complete loss of consciousness - motion of the facial muscles - frequent involuntary jerking of the lower limbs - with a bluish color of the face - and the breathing being interrupted for a few moments. do not

Cuprum. Convulsive movements and distortions of the limbs - twitchings of the fingers arms and hands backwards and then again inwards, towards the body. This remedy is particularly adapted if the above symptoms occur at night.

Zincum. Has been successfully employed



in the last stage of this disease, with symptoms of incipient paralysis of the brain administered in half grain doses every two hours, until improvement set in.

In this disease as well as in any other that we may be called upon to treat, the symptoms presented must be our guide. Although certain remedies have been prescribed in the different stages of hydrocephalus, we do not wish to be understood as administering them according to the stages. The materia medica or symptomien codex, can in no case be dispensed with. The study of symptoms is laborious. But the mariner might as well try to do without his compass, as for the intelligent Homoeopathic physician, to dispense with his symptom book, in treating the disease under consideration, as well



as all others, Should any one who has de-  
-voted himself to the practice of pure Homeo-  
-pathy find his heart failing at the task  
before him, let him rest for an instant  
and contemplate the labours of the immor-  
-tal founder of the system. He never wearied  
in the part of well doing, and enduring  
sacrifices and privations for the cause of  
alleviating the sufferings of his fellow  
man. His example is truly worthy of im-  
-itation. He has shown us the path he  
has strewn the way comparatively with  
flowers. Let us, in our study of the cause,  
and symptoms of diseases, endeavour to fol-  
-low his suggestions; and in so doing we  
may be certain it is the best that can  
be done for our patients, and possess  
the consciousness that we are discharging  
those duties that devolve upon us to per-



-form as faithful and intelligent practitioners of Homoeopathic medicine.

*on*  
Hypertrophy of the Heart

Respectfully Submitted

To the Faculty of the

Homeopathic Medical College

of Pennsylvania

on the

24<sup>th</sup> day of January

One thousand eight hundred & fifty three

by

Osborne O. Roberts

of  
Lyndon Vermont